

## EZSyn2301

EZSync USB to RS-485/RS-422 Magnetic Isolated Serial Converter

### Features



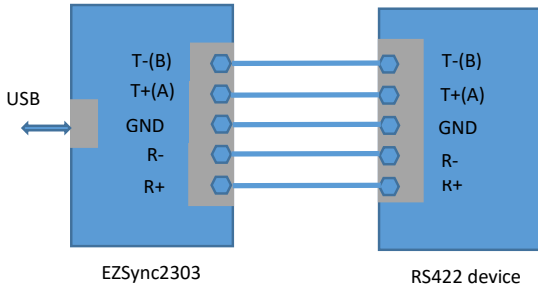
- Industrial grade high performance **2500V isolated** USB to RS485/RS422 adapter based on more reliable magnetic isolation technology from ADI
- Support RS422 (R+, R-, T+(A), T-(B), GND) or RS485(T+(A), T-(B), GND) interface. Shows up as a virtual COM port, compatible with all Windows and Mac OS versions.
- ESD Protection for RS-485 I/O's  $\pm 15\text{kV}$  Human Body Model (HBM)  $\pm 15\text{kV}$  EN61000-4-2 Air Gap Discharge  $\pm 8\text{kV}$  EN61000-4-2 Contact Discharge
- Visual indication of Tx/Rx data traffic and power status via LEDs
- Size: 70mm\*45mm\*24mm (2.75in\*1.77in\*0.95in). USB powered, package includes a 1-meter USB cable for PC connection

EZSync3201 is an industrial grade port powered isolated USB to RS485 / RS422 adapter. It provides an isolated 2-wire RS485 or 4-wire RS422 interface through a regular USB interface. The circuit is built around high-performance FTDI USB-to-Serial chip and ADI magnetic isolation chip. The FTDI chip basically makes it compatible with all the Windows and Mac OS versions. Comparing to optical isolation, the superior magnetic isolation technology from ADI enables high-speed bidirectional data transferring with great ground loop noise and voltage spike immunity. The adapter draws power from USB port and no external power supply is required. The USB to serial chip is compatible with all the Windows and Mac OS versions and it shows up as a COM port in Windows device manager after driver installation.

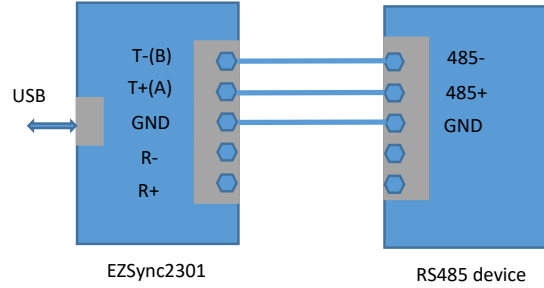
### Specification

Model Number	EZSync2301
Product Name	EZSync USB to RS-485/RS-422 Magnetic Isolated Serial Converter
Cable Length	1.0 meter, ~3 feet
Interface A	USB typeB, 1.0/2.0/3.0(12 Mbps)
Interface B	RS485/422, Terminal block
Baud Rate	300bps to 460800bps, auto detection
Chipset	FT230XS+ADuM1301
Isolation	2500Vac Signal, 3000Vac Power supply
RS485 Signals	RS422 (R+, R-, T+(A), T-(B), GND) or RS485(T+(A), T-(B), GND)
Flow control	X-On / X-Off software handshaking
Driver Support	All windows, Mac OS and Linux versions including the latest Windows10 and Mac OS X 10.12(Sierra)
Operating temperature	-40°C to +85°C
Anti-surge	Anti-surge: triple protection against line surge (TVS, GDT and capacitor filtering network)
Size	70mm*45mm*24mm(2.75in*1.77in*0.95in)

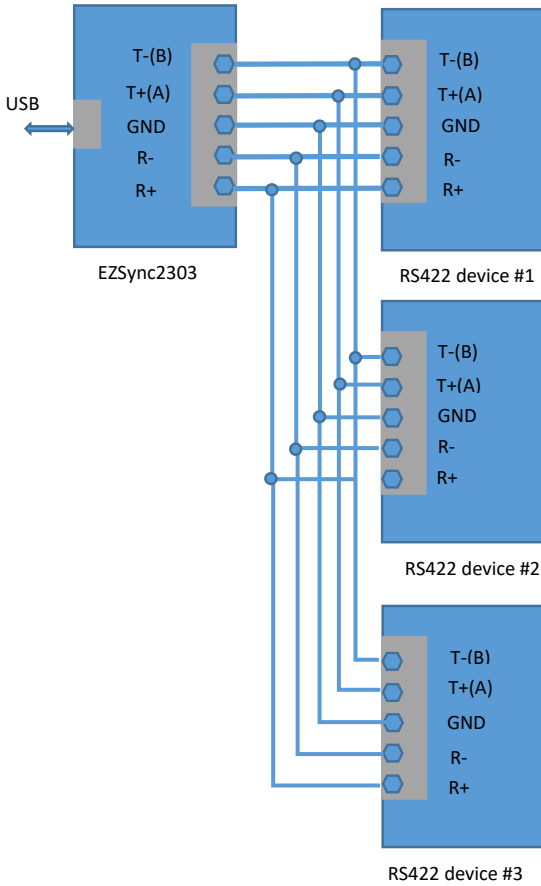
## Wiring Method: RS485 and RS422



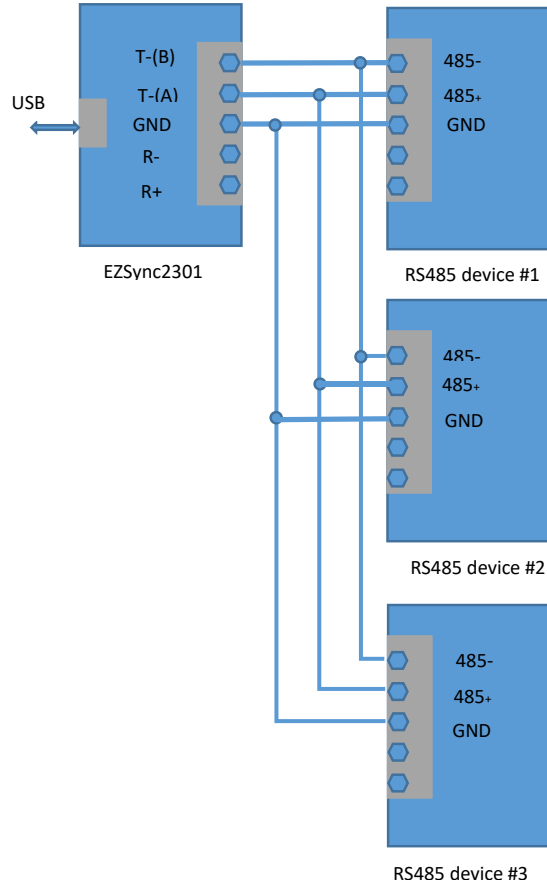
RS422 Point to point connection



RS485 Point to point



RS422 Point to multipoint connection



RS485 Point to multipoint connection



## Models comparison table

### EZSync converter/isolator models comparison table

Model number	EZSync203	EZSync2112	EZSync2210	EZSync202	EZSync2127	EZSync2201	EZSync2301	EZSync2302
Baud rate	300 - 115200bps	300 - 115200bps	300 - 115200bps	300 - 57600bps	300 - 115200bps	300 - 115200bps	300-460800bps	300-921600bps
Power	Port-powered from RS232 (RTS or DTR, TXD)	External powered from 9-48 VDC input. 110/240VAC to 12VDC power supply adapter is included	Port-powered from RS232 (RTS or DTR, TXD).	Port-powered from RS232 (RTS, DTR, TXD)	Port-powered from RS232 (RTS or DTR, TXD). Optional external power: 5 - 12VDC	Port-powered from RS232 (RTS or DTR, TXD)	Port-powered from USB port	Port-powered from USB port
Interface A	RS-232, DB9 female connector	RS-232, DB9 female connector	RS-232, DB9 female connector	RS-232, DB9 female connector	RS-232, DB9 female connector	RS-232, DB9 female connector	USB, Type B	USB, Micro-B
Interface B	RS422, DB9 male AND 6-port terminal board	RS-232, DB9 male connector	TTL, DB9 female connector	RS-232, DB9 male connector	RS-485/422, 6-port terminal board	RS422, DB9 male AND 4-port terminal board	RS485/422 Terminal block	RS485/422 Terminal block
Isolation	NONE	2500Vrms / 500VDC	NONE	2500Vrms / 500VDC	2500Vrms / 500VDC	NONE	2500Vrms	1500Vrms
Transient protection	600W TVS	15KV ESD	600W TVS	15KV ESD	15KV ESD, 600W TVS	600W TVS	15KV ESD, 600W TVS	15KV ESD
Transmission distance	RS232: 15 FT (5m) RS422/RS485: up to 4000 FT (1200m)	RS232: 15 FT (5m)	RS232: 15 FT (5m) TTL: 15 FT (5m)	RS232: 15 FT (5m)	RS232: 15 FT (5m) RS422/RS485: up to 4000 FT (1200m)	RS232: 15 FT (5m) RS485: up to 4000 FT (1200m)	RS485/422: 30 FT(10m) USB: 15 FT(5m)	RS485/422: 15 FT(5m) USB: 15 FT(5m)
Operating Environment	-25°C to 70°C, 5%-95% RH	-40°C to 85°C, 5%-95% RH	-40°C to 85°C, 5%-95% RH	-40°C to 85°C, 5%-95% RH	-40°C to 85°C, 5%-95% RH	-25°C to 70°C, 5%-95% RH	-40°C to 85°C, 5%-95% RH	-40°C to 85°C, 5%-95% RH
Dimensions	63mm x 34mm x 18mm	113mm x 55mm x 33 mm	63mm x 34mm x 18mm	63mm x 34mm x 18mm	61mm x 41mm x 21mm	63mm x 34mm x 18mm	70mm x 45mm x 24mm	60mm x 40mm x 20mm

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